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News Summary

Articles on inside pages

The State Department has tried to reassure universities that it plans no increase in its regulation of university activities. Story on Page 7.

Voluntary controls on scholarly publications, proposed by a top C.I.A. official, have provoked sharp criticism from scientists. Story on Page 7.

Television broadcasts of college football games will remain in the firm control of the National Collegiate Athletic Association. Story on Page 4.

Stiff new penalties to end cheating in college sports have been approved by the N.C.A.A. Story on Page 4.

Members of the Association of Intercollegiate Athletics for Women have taken steps to prepare for the group's disbanding. Story on Page 5.

The Supreme Court has sidestepped a ruling on the right of private universities to restrict activities by outside groups. Story on Page 13.

The Court also ruled that a campus policeman who did not have a search warrant had the right to arrest a student in a dormitory. Story on Page 13.

Operating expenses rose 13 per cent at private colleges and 11 per cent at public colleges in fiscal 1980. Story and table on Pages 10-11.

Foul weather has disrupted activities this month on campuses in many states. Stories on Page 12.

"Cultural power" will be a chief focus of *Raritan*, a new intellectual journal. Story on Page 23.

Soviet scientists are upset by a decline in interest in science among Russian youth. Story on Page 19.

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Reagan Seeks Law to Bar Tax Exemptions for Institutions that Practice Discrimination

President acts after heavy criticism of change by the IRS in an 11-year-old policy

By CHERYL M. FIELDS

WASHINGTON

President Reagan said last week that he would ask Congress to bar tax exemptions for educational institutions and other organizations that practice racial discrimination.

His announcement followed a storm of criticism that erupted after the Internal Revenue Service announced that it would no longer deny tax-exempt status to educational institutions that discriminate against blacks, as the agency had done since 1970.

The Justice Department had also asked the Supreme Court to drop two cases it had previously agreed to hear challenging previous I.R.S. decisions to deny tax exemptions to Bob Jones University and Goldsboro Christian Schools in Goldsboro, N.C.—saying the new I.R.S. policy made the cases moot.

▪ **Texts** of the Justice Department memorandum and President Reagan's statement appear on Page 16.
▪ **A sampling** of newspaper editorial reaction to the Justice Department decision appears on Page 17.
▪ **Bob Jones University** is proud of being different. Story on Page 16.

The Internal Revenue Service and the Justice Department—which had asked the Supreme Court last fall to uphold the denial of tax exemptions to the institutions—defended the shift in policy by saying that the Reagan Administration deplored racial discrimination but did not believe tax laws gave the I.R.S. the authority to deny institutions tax-exempt status.

The agencies said Congress could pass legislation specifically giving the I.R.S. that authority if it believed it should have it.

The President underscored that argument in announcing he would propose legislation to Congress, saying that while he was "unalterably opposed to racial discrimination in any form. . . . I am also opposed to administrative agencies exercising powers that the Constitution assigns to the Congress.

"Such agencies, no matter how well intentioned, cannot be allowed to govern by administrative fiat. That was the sole basis of the decision announced by the Treasury

Continued on Page 16, Column 1

Poland's Military Government Suspends All University Reforms Won Last Winter

By SUE MASTERMAN

VIENNA

Poland's military government last week suspended all of the reforms won by university students after widespread strikes last winter at the country's institutions of higher education.

Under new regulations issued by the Ministry of Higher Education, Poland's 104 colleges and universities will face strict controls designed to prevent any political activity by students and faculty members.

A ministry spokesman has indicated that the universities will reopen in mid-February.

All educational institutions were closed December 13 when the government imposed military rule in Poland. Elementary and secondary schools reopened January 4, and some graduate programs have resumed.

▪ **In New York:** Three American foundations will aid Polish scholars stranded in the West. Story on Page 21.
▪ **In Paris:** Four leaders of Poland's student union say they will continue the group's work in exile. Story on Page 21.

However, the government has delayed the reopening of the universities, apparently until it feels sure it can prevent further outbreaks of student unrest.

Earlier this month, the military rulers announced that one of the chief sources of that unrest—N.Z.S., the independent student union known by its Polish initials—had been dissolved.

The regulations, which set conditions that must be met in order for the universities to reopen, are an indication that the brief period of democratization of higher education after last winter's protests has come to an end.

Specifically, the Ministry of Higher Education suspended reforms that granted universities the right to set their own curricula, and provided for student and faculty representation on university senates.

It also said students would once again be required to take compulsory courses in Russian and in Communist ideology. The

Continued on Page 21, Column 1

Students Rush to Beat Cutoff of Social Security Aid

By JANET HOOK

With thousands of students facing a May 1 deadline for enrolling in college or losing their eligibility for Social Security education benefits, some high-school seniors are trying to get an early start on their college careers this spring.

Although such moves to beat the May 1 cutoff of benefits—and special efforts by colleges and universities to accommodate such students—have been seen only in scattered regions thus far, the numbers are expected to grow as more high-school seniors and their families learn of the impending elimination of a $2.3-billion program by the Social Security Administration.

In its budget-cutting campaign last sum-

Continued on Page 14, Column 4

How Benefits Will Be Affected

Under new federal guidelines, college students may continue to receive Social Security benefits only if they:

▶ Are enrolled full time in an institution of higher education before May, 1982.

▶ Were on the Social Security rolls—either as a high-school or college student—before September, 1981. Children who became eligible for benefits after that date, even if they are now enrolled in college, will receive payments only until July, 1982.

Eligible students can continue to draw benefits until April, 1985, or their twenty-second birthday—whichever comes first—as long as they are unmarried and enrolled full time.

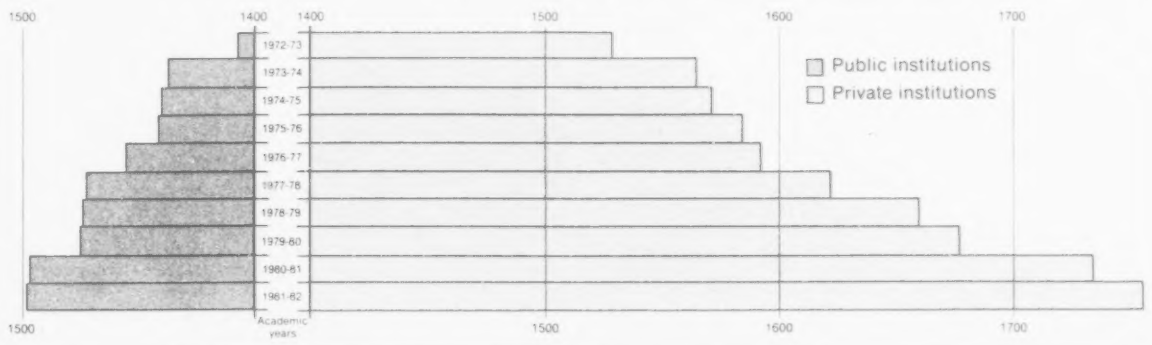
However, those benefits will be subject to the following reductions:

▶ Students will receive 25 per cent less in the academic year beginning September, 1982, 50 per cent less as of September, 1983, and 75 per cent less as of September, 1984. All payments will be eliminated after April, 1985.

▶ Annual cost-of-living increases will be eliminated.

▶ Benefits will no longer be paid for the months of May, June, July, and August.

THE GROWING NUMBER OF COLLEGES



	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Public institutions										
4-year	536	544	544	545	550	552	550	549	552	558
2-year	871	893	897	897	905	921	924	926	945	940
All	1,407	1,437	1,441	1,442	1,455	1,473	1,474	1,475	1,497	1,498
Private institutions										
4-year	1,286	1,311	1,327	1,353	1,363	1,386	1,391	1,405	1,405	1,420
2-year	243	254	244	231	229	236	269	272	329	335
All	1,529	1,565	1,571	1,584	1,592	1,622	1,660	1,677	1,734	1,755
Public and private combined										
4-year	1,822	1,855	1,871	1,898	1,913	1,938	1,941	1,954	1,957	1,978
2-year	1,114	1,147	1,141	1,128	1,134	1,157	1,193	1,198	1,274	1,275
Total	2,936	3,002	3,012	3,026	3,047	3,095	3,134	3,152	3,231	3,253

CHRONICLE CHART BY PETER H. STAFFORD SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

U.S. Says Number of Private Colleges Is Increasing

By JACK MAGARRELL
WASHINGTON

The federal government's official list of American colleges and universities shows that private higher education is expanding, with more institutions every year. But not everyone believes that.

The National Institute of Independent Colleges and Universities, which surveys private institutions every two years for a report on openings and closings, contends that the total number of private colleges and universities has been declining.

The government's National Center for Education Statistics and the private colleges' institute recognize that they are not counting institutions on the same basis. The institute counts only nonprofit institutions; N.C.E.S. includes some proprietary institutions.

The newly published 1981-82 edition of N.C.E.S.'s *Education Directory* reports a total of 3,253 recognized institutions of higher education in the 50 states and District of Columbia in the current academic year. That is 22 more than N.C.E.S. reported a year ago and 317 more than it reported in 1972-73.

Private colleges and universities account for 21 of the 22 additional institutions reported this year, and 226 of the 317 institutions added since 1972-73.

To be counted and listed in the N.C.E.S. directory, an institution must meet one of three criteria:

▶ Be accredited at the college level by an agency recognized by the Secretary of Education.

▶ Have "preaccredited status" (progressing toward accreditation) at the college level with a nationally recognized accrediting agency.

▶ Be a public or nonprofit institution whose credits are accepted by at least three accredited college-level institutions.

The rules for being included in the *Education Directory* have been changed at least twice in the past 10 years in ways that increased the number of profit-making institutions listed:

▶ In 1978-79 the list was opened to institutions offering one-year programs at the college level. Previously, programs that were shorter than two years did not qualify.

▶ In 1980-81 the list of agencies whose accreditation would qualify an institution for inclusion in the directory was expanded to include the National Association of Trade and Technical Schools, which accredits occupational, trade, and technical programs.

The 1,755 private institutions reported by the N.C.E.S. this year include 148 two-year institutions and 20 four-year institutions that are profit-making organizations. Comparable figures for previous years are not available.

Officials at the N.C.E.S. said future statistical reports would attempt to distinguish more clearly between nonprofit and profit-making private institutions.

Virginia Hodgkinson, executive director of the independent colleges' institute, said her organization had been complaining for several years that the N.C.E.S. was mixing for-profit and nonprofit private institutions in its statistics. The result, she said, was that N.C.E.S. showed an increasing number of private institutions while the institute reported a decline in the number of nonprofit colleges and universities.

The institute's most recent survey of nonprofit institutions, for 1979-80, showed that 76 private colleges or universities had opened during the previous 10 years while 129 had closed. Results of the organization's next survey of openings and closings are to be published next fall.

The number of public colleges and universities reported by N.C.E.S. has been more stable and less disputed than the number of private institutions.

Compared with last year's directory, this year's edition lists six more public four-year institutions and five fewer public two-year institutions. Since 1972-73, according to the N.C.E.S. count, the number of public four-year institutions has increased by 22 and the number of public two-year institutions has increased by 69.

The N.C.E.S. says the 1981-82 *Education Directory* lists among the private institutions 168 profit-making organizations, 814 independent nonprofit institutions, and 773 institutions affiliated with religious groups.

The religious affiliations listed were: Protestant—454 four-year and 52 two-year; Roman Catholic—207 four-year and 21 two-year; Jewish—24 four-year and no two-year; others—13 four-year and 2 two-year.

til he was 68, he would earn a total of $1.2-million. Judge Sacco lowered that figure to $800,000 and ordered the $120,000 payment to Marianne Reen of Springfield.

The couple separated after 10 years of marriage when Dr. Reen graduated from Northwestern University in 1978. Ms. Reen's lawyer testified that she had agreed to work while her husband completed work on his undergraduate degree and went to dental school.

▪ 2 Judges Withdraw from New Hampshire Case

New Hampshire's two federal district judges have disqualified themselves from hearing a case brought against the University of New Hampshire by the Collegiate Association for the Research of Principles, which university officials say is an arm of Sun Myung Moon's Unification Church, and which is seeking status as a student organization. The university denied recognition to the association in October.

Court officials said that either the case would have to be tried in a neighboring jurisdiction or a federal judge from another district would have to come to New Hampshire to preside.

Judge Martin F. Loughlin granted the organization's request for a mistrial after its lawyers argued that he had made remarks during earlier hearings indicating that he was prejudiced on the matter.

Judge Shane Devine disqualified himself because he is a former partner in the law firm that represents the university.

▪ Medical-School Enrollment Totaled 65,497 in 1980-81

The number of medical students in the U.S. rose to 65,497 in 1980-81, up from 64,195 the previous year, according to the *Journal of the American Medical Association*.

The number of full-time medical-school faculty members also rose, from 48,892 to 50,536, making the ratio of instructors to students 1.3 to 1.

The *Journal* also reported a total of 17,146 first-year medical students in 1980-81; of those, 4,970 were women and 2,290 were members of minority groups. About 27 per cent of all medical-school students are women, and about 13 per cent are minority-group members.

▪ Correction

The first item listed in "In Federal Agencies" in the January 6 issue of *The Chronicle* should have said, "The Department of Education has published a list of accrediting and state-approved agencies that it is reviewing to determine whether they should continue to be listed as reliable authorities on the quality of education."

Notes on . . .

The Student Press

Reporters for the student daily at Northern Illinois University became embroiled recently in a journalistic-ethics controversy that led observers—both on the De Kalb campus and in the Chicago media—to ask how much license the First Amendment's guarantee of freedom of the press gives a student newspaper to violate campus regulations.

The question arose after the *Northern Star* published an article about the university's health center. The paper said it had undertaken the article after several students complained that they had been given prescriptions on the basis of medical examinations that were cursory at best.

To test the complaints, four of the paper's reporters went to the health center at different times, complaining of anxiety, sleeplessness, menstrual cramps, and other ailments. The students did not identify themselves as reporters. After examinations that they described as brief, the reporters were prescribed small doses of Valium and other drugs. They did not have the prescriptions filled.

(According to a university spokesman, health-center physicians routinely prescribe such medication—in amounts only large enough to tide the student over until he can seek counseling or regular medical attention—without thorough examinations.)

After the article appeared, the university's vice-president for student affairs brought charges against the reporters and their supervisor under the university's judicial code, which forbids students to misrepresent themselves to university officials. The *Star* itself carried a number of letters about the article, some praising the paper's initiative and others maintaining that its tactics were unethical.

The story soon reached the Chicago papers, which defended the *Star*'s investigation in columns and editorials, the spokesman said. The *Star*'s champions—who were joined by some members of the American Civil Liberties Union—suggested that the university was violating the First Amendment by bringing charges.

The university's position, however, was that the four were students first and reporters second, and could reasonably be expected to abide by the strictures of the judicial code.

The university's president, William R. Monat, eventually ordered the charges dropped on the advice of the university's lawyers, the spokesman said. Mr. Monat has also set up a committee to study the health center's prescription procedures.

▪

When the health service at the University of Wisconsin at Stevens Point needed something to call attention to a poster advertising its birth-control counseling, it chose a character from the comic strip "Peanuts." The character was Lucy, and she was pregnant.

Staff members of the university's student weekly, the *Pointer*, viewed the poster as sexist, because it failed to show that men and women are equally responsible for pregnancies. So the paper ran a parody of the poster, which showed Charlie Brown and Lucy in what could delicately be called a compromising position.

It was too much for the United Feature Syndicate, which distributes "Peanuts." Claiming that the *Pointer* had infringed upon its copyright, the syndicate filed suit in federal court against *everybody*—the university regents, the head of the health service, the paper's editor, its faculty adviser—even the local press that prints it. The suit asks damages of $250,000.

—LAWRENCE BIEMILLER

JOHN FORASTE

Brown U.'s Howard R. Swearer

NCAA Rejects Efforts by Football Group

By LORENZO MIDDLETON

HOUSTON

The National Collegiate Athletic Association last week established firm control over all means of televising college football games.

Members attending the association's annual convention here overwhelmingly rejected efforts by the College Football Association to put the control of contracts for televised football games in the hands of individual institutions. The C.F.A. is a group of 61 N.C.A.A. member institutions that have major football programs.

Proposals by C.F.A. members that would have taken control of television "property rights" away from the N.C.A.A. were soundly defeated by the 632 athletic directors, college presidents, and faculty representatives at the convention. They also approved a change in the N.C.A.A. constitution that spells out for the first time that the "telecasting, cablecasting, or otherwise televising of intercollegiate football games of member institutions shall be controlled by bylaws enacted by the association."

A final settlement of the issue is not expected until courts rule on two pending lawsuits filed against the N.C.A.A. by C.F.A. institutions.

Leaders of the N.C.A.A. assert that the organization has had control over television rights since 1956. But its authority was challenged last summer, when the C.F.A. decided to negotiate its own contract with NBC-TV. That contract would have conflicted with the N.C.A.A.'s pacts with ABC and CBS. The C.F.A. members pulled out of the agreement with NBC after the N.C.A.A. ruled that institutions signing the maverick contract would be severely penalized.

The conflict began over network television contracts, but by last week it had broadened to include contracts with cable and other forms of pay television.

John O. Bolvin, faculty representative from the University of Pittsburgh, argued that the institutions should be allowed to control cable and subscription-television packages because those media were "still in the formative stages." Individual institutions or conferences "should be allowed to experiment with different means of using this new technology," he said.

But Wiles Hallock, executive director of the Pacific 10 Conference and chairman of the N.C.A.A. football-television committee, argued that "decontrol of any form of television is really tantamount to decontrol totally of live television."

Walter Byers, the N.C.A.A.'s executive director, added that if the association were to lose its grip on television, it would leave control in the hands of the television networks, creating "a limited TV aristocracy." He called for a halt to the C.F.A.'s legal action against the athletic association.

However, representatives of the University of Texas, which has filed a lawsuit against the N.C.A.A. in state court in Texas, and the Universities of Georgia and Oklahoma, which have filed a similar suit in U.S. district court in Oklahoma City, said their institutions had no plans to drop the litigation. The lawsuits challenge the N.C.A.A.'s control of their television "property rights."

The University of Texas made an unsuccessful attempt to delay the decision on the television matter until after the courts had decided the issue.

On the first day of the convention, the leaders of the N.C.A.A. were served with a temporary restraining order, obtained by the university, di-

Association Votes Itself New Powers to Penalize Institutions

HOUSTON

In a stepped-up effort to discourage cheating by college athletic officials, the National Collegiate Athletic Association last week gave itself the power to impose stiff new penalties against offending institutions.

Under one new procedure, the association's infraction committee now has authority to prohibit live television coverage of a team whose TV contracts are not controlled by the association.

In the past, prohibitions against television coverage have been limited to football, the only sport for which in-season television contracts are controlled by the N.C.A.A. Penalties against basketball and other nonfootball programs were largely limited to restrictions against postseason competition.

Now those teams could be banned from lucrative live-television appearances during the regular season. However, some critics of the measure have pointed out that institutions might circumvent such penalties by delaying the transmission of their games by two minutes or more, in which case the telecasts technically would be "delayed" rather than "live."

Under another new rule, athletes would be allowed to transfer freely from institutions that have been prohibited from playing in postseason games.

With the approval of the N.C.A.A. Council, an athlete would be allowed to enroll in another institution without losing a year of playing eligibility, as would other athletes under normal transfer circumstances.

This rule was designed to answer a longstanding criticism, said John W. Sawyer, a faculty representative from Wake Forest University, "that many innocent athletes are penalized excessively" when their institutions are banned from postseason games for infractions that do not involve them personally.

Several N.C.A.A. officials predicted that the new transfer rule would prove to be one of the association's strongest deterrents to illegal recruiting actions and other rules violations.

In another measure, designed to discourage cheating, the association adopted a recommendation to encourage institutions to dismiss coaches found to be involved in N.C.A.A.-rule violations.

The members of the association rejected a proposal that would have allowed the N.C.A.A. to impose up to $50,000 in fines on institutions violating its rules.

Over the past two years, the association's enforcement officers have relied on athletes to turn over information about illegal practices of their recruiters and coaches.

The athletes have been reached mainly through two programs, "Operation Big Brother" and "Operation Intercept."

Under Operation Intercept, N.C.A.A. investigators visit the top 100 high-school football and basketball players each year, lecturing them on proper recruiting procedures and asking them for information about college representatives who might be violating those procedures.

Under the Big Brother program, each of the eight investigators "adopts" four of the most sought-after players (two in football and two in basketball), visiting them frequently to keep abreast of who is recruiting them and how.

Obtaining information directly from the athletes shortens the interval between the commission of an infraction is committed and the time it is reported, said S. David Berst, the association's director of enforcement. He said athletes had helped the association build strong cases against institutions that were violating the rules.

Information from two former basketball players at Wichita State University led the association to put that university on probation for three years, Mr. Berst announced last week. The violations in the men's basketball program occurred between 1975 and 1980.

Under the sanctions announced by the N.C.A.A. last week, the men's basketball team at Wichita State was prohibited from participating in postseason games in 1982 and 1983 and ordered to give up two scholarship positions.

"Numerous violations related to the receipt of commercial airline transportation, cash, clothing, and use of an automobile by former student athletes, as well as promises to make such benefits available to recruits, were found in this case," said Charles Alan Wright, chairman of the N.C.A.A. infractions committee.

Mr. Wright added that "large sums of money from unidentified sources outside the institution apparently were utilized to pay costs associated with the improper benefits made available to student athletes in this case. The availability of such funds in the past makes it imperative that the N.C.A.A. compel the university to take every precaution to avoid the improper use of such resources in the future."

Mr. Berst added that Wichita State, which has been penalized six times since the N.C.A.A. enforcement program began in the 1950's, now holds the association record for penalties.

—LORENZO MIDDLETON

The 15 Institutions Now on NCAA Probation

	Probation expires	Sport	Sanctions in effect	Grounds for probation
Arizona State University	12/30/82	Football	No televised games in 1982, one booster barred from recruiting	Improper recruiting, extra benefits to athletes
Arkansas State University	10/15/83	Basketball	No postseason competition in 1982	Improper recruiting
University of California at Los Angeles	12/4/83	Basketball	No postseason competition in 1982, two boosters barred from recruiting	Improper recruiting
University of California at Santa Barbara	12/1/82	Basketball	No postseason competition in 1982	Improper recruiting, extra benefits to athletes
California State Polytechnic U. at Pomona	1/17/83	Basketball	No postseason competition in 1982	Unearned grades
University of Colorado	12/8/82	Football	None	Improper recruiting
Southern Methodist University	6/9/83	Football	None	Improper recruiting
University of Miami	11/2/83	Football	No postseason competition in 1982, 10 athletic scholarships cut in 1982-83	Improper recruiting
University of New Haven	6/1/82	Basketball	No postseason competition in 1982	5-year rule, out-of-season practice, tryouts
University of New Mexico	11/28/83	Basketball	No postseason competition in 1982	Fraudulent transcripts, extra benefits to athletes
University of Oregon	12/22/83	Football	No postseason competition and no televised games in 1982, five athletic scholarships cut in 1982-83, three athletic scholarships cut in 1983-84, one basketball scholarship cut in 1983	Unearned grades, extra benefits to athletes
Texas Christian University	10/28/82	Basketball	One assistant coach barred from recruiting in 1982-83	Unearned grades, extra benefits to athletes, unethical conduct
West Texas State University	6/1/82	Basketball	None	Improper recruiting, extra benefits to athletes
Wichita State University	12/18/84	Basketball	No postseason competition in 1982 or 1983, one athletic scholarship cut in 1982-83 and 1983-84	Extra benefits to athletes, recruiting inducements
University of Wisconsin at Madison	12/18/82	Football	None	Improper recruiting

SOURCE: NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

Summary of Most Common Rule Violations in Sports

HOUSTON

Following is a summary of the most common violations of National Collegiate Athletic Association rules from 1978 through 1981 and the number of times they were committed:

More than 20 Times

Improper transportation or entertainment of prospective athletes or their families.

Improper recruiting inducements to prospective athletes, including cash payments, use of automobiles, free clothing, housing, or promises of such benefits.

Extra benefits to enrolled athletes, such as cash payments, special bank loans, use of automobiles, meals, and clothing.

10 to 20 Times

Improper financial aid, including payment of personal costs for athletes.

Failure to give athletes adequate notice that their scholarships will not be renewed.

Financial aid in excess of amount permitted.

Unearned academic credits to athletes.

Intentional serious violations by athletic administrators, or denial of allegations later found to be true.

Improper recruiting contacts.

Improper workouts with team members by prospective athletes.

4 to 10 Times

Failure to prevent improper recruiting activities by outside athletic representatives ("boosters").

Out-of-season practices.

Athletes permitted to play for more years than they were eligible.

1 to 3 Times

Monetary compensation to students for participating in college sports.

Rules violated with knowledge of college president.

Improper contacting of news media by coaches.

Excessive number of games played in one season.

Athletes ineligible because of low grade-point average.

Excessive number of scholarships awarded.

Excessive number of coaches.

Failure to cooperate with enforcement procedures.

Censorship

Continued from Preceding Page

Academy of Sciences and former science adviser to President Carter, said censoring the publication of scientific data to prevent the Soviet Union or other adversaries from using them, as implied in the proposal, would be "a regressive step."

"The damage would be so great as not to warrant the little good that it would do," he said. "It's the price we have to pay for a free society."

'The Tides Are Moving'

A Congressional Research Service report released last week concludes that the United States is losing the technological edge that has enabled it to counter the Soviet bloc's military superiority in men and equipment.

The report, commissioned by Rep. Ike Skelton, Democrat of Missouri, says a major problem is that the Soviets have five times as many engineering students as the United States has.

"I think the tides are moving, and they are moving pretty fast toward legislative solutions" to limit open scientific communication, Admiral Inman said.

"It's important for the professional [science] societies to take the lead to define the national security areas of concern before the public overreacts with legislation."

While Pentagon and university officials have been working in past months to resolve their differences on limiting foreign scholars' participation in research, the A.A.A.S. and other scientific organizations are strongly opposed to any restrictions on open scientific communication among U.S. scientists.

"The whole basis on which scientific research makes progress is by open disclosure," said Mr. Carey of the A.A.A.S. "Those rights are going to be strongly usurped" by limitations on scientific publication and presentations to colleagues, he said.

Government Control Seen

Mr. Carey said Admiral Inman's proposal that scientists voluntarily control their colleagues' data really amounted to government control, because federal officials would have to advise the scientists about the types of research results that should not be disclosed.

Such a system would be "a nightmarish situation, for the reason that it wouldn't be Bobby Inman who would be reading the proposals, but intelligence types," Mr. Carey said.

While serving as director of the National Security Agency, Admiral Inman required researchers in cryptography, the mathematical science of making and breaking codes, to submit their papers to the N.S.A. before publication.

The agency followed this practice for several years until last April, when it, the National Science Foundation, and the American Council on Education cooperated to develop a voluntary review system in which scientists submit papers to the agency for clearance before they are published.

About 25 papers have been reviewed since then and none has produced security concerns, said Daniel C. Schwartz, former general counsel for the agency.

Mr. Press said the system of review was an "interesting" way to deal with the problem, but added that he had reservations about applying it to all scientific fields.

Arms Control Act

One legislative measure, H.R. 109, introduced last year, would give the Secretaries of Defense, Energy, and State the authority to decide what type of information could be controlled under the Arms Export Control Act. The act was designed to curb the export of materials that can quickly be applied to military purposes.

The measure, introduced by Rep. Charles E. Bennett, Democrat of Florida, remains in the House Foreign Affairs Committee and has gained no additional sponsors.

The bill has been opposed by the Association for Computing Machinery, an organization of computer scientists, which contended that it could "encroach on First Amendment and other rights."

"By treating ideas in the same category as military hardware [regulated under the Act]," the group said, "this bill extends unreasonably the ability of the government to control what technical ideas its citizens can publish."

"The U.S. scientific community has a proven record of success in promoting national interests," said Peter J. Denning, chairman of Purdue University's computer-science department and president of the association.

"Government intervention to reduce risk clearly would upset this system, reduce its effectiveness, create friction with the scientific community, and not work. This is why I believe that control over scientific publication would not significantly reduce the risk to national security but would exact a cost to technology and science."

Mr. Denning said the present policy of open scientific communication had helped transform ideas into technological improvements, which in turn have promoted the economic leadership of the country.

"The policy of secrecy would seriously weaken this system," he said. "If you want to win the Indianapolis 500 race, you build the fastest car. You don't throw nails on the track."

—KIM McDONALD

FACT-FILE

Mean Scores of 473,944 Applicants Who Took ETS's Test of English as a Foreign Language

	Number of cases	Listening comprehension	Structure and written expression	Reading comprehension and vocabulary	Mean total score
AFRICA					
Algeria	620	52	49	50	501
Angola	32	53	47	49	497
Benin (Dahomey)	28	49	49	49	491
Botswana	70	57	56	56	568
Cameroon	428	52	54	53	535
Cape Verde Islands	81	51	46	47	482
Congo	20	44	45	45	452
Djibouti	15	51	49	50	495
Egypt	3,912	50	47	48	485
Ethiopia	785	53	50	49	506
Gambia	76	52	51	51	514
Ghana	2,505	53	58	57	560
Guinea	37	45	42	44	438
Ivory Coast	440	49	49	50	495
Kenya	1,161	55	57	55	554
Lesotho	38	56	58	56	566
Liberia	375	53	51	51	517
Libya	3,262	48	41	41	433
Madagascar	34	50	51	54	515
Malawi	60	58	59	58	584
Mali	58	46	42	47	449
Morocco	457	52	50	51	514
Mozambique	16	56	52	55	544
Niger	37	49	51	52	507
Nigeria	15,020	49	52	52	512
Rhodesia (now Zimbabwe)	382	55	57	55	558
Senegal	98	50	50	50	499
Sierra Leone	276	53	53	53	532
Somalia	274	49	47	49	485
South Africa	139	59	58	58	585
Sudan	901	47	48	48	475
Swaziland	35	59	57	56	571
Tanzania	379	53	54	54	539
Togo	28	48	49	52	496
Tunisia	191	51	49	50	498
Uganda	225	54	57	56	550
Upper Volta	28	49	50	51	502
Zaire	216	48	47	48	475
Zambia	230	55	55	54	547
AMERICAS					
Argentina	1,161	55	52	56	541
Bolivia	829	53	47	50	502
Brazil	4,263	51	48	52	506
Canada	679	58	52	55	551
Chile	1,229	54	49	53	520
Colombia	3,331	53	48	51	508
Costa Rica	750	54	49	52	513
Cuba	328	55	50	54	532
Dominican Republic	397	54	48	51	511
Ecuador	929	53	47	51	505
El Salvador	1,154	54	48	51	509
Guadeloupe	15	54	51	50	516
Guatemala	583	55	49	53	525
Guyana	58	58	56	57	572
Haiti	945	52	50	52	512
Honduras	616	54	48	51	509
Jamaica	51	59	55	55	561
Mexico	5,627	53	48	53	514
Netherlands Antilles	330	60	53	53	552
Nicaragua	847	54	47	50	500
Panama	1,134	53	47	50	501
Paraguay	103	53	49	53	515
Peru	1,746	53	48	52	509
Puerto Rico	1,181	55	49	53	525
Saint Martin	26	54	51	52	523
Surinam	110	58	53	52	544
Trinidad	38	61	58	57	584
United States	783	59	55	55	561
Uruguay	216	57	53	56	551
Venezuela	9,141	50	45	49	481
ASIA					
Afghanistan	183	52	45	46	478
Bangladesh	1,788	49	49	52	501
Bhutan	20	50	52	52	515
Brunei	154	54	49	50	513
ASIA (Continued)					
Burma	303	52	49	50	504
Cambodia	125	52	47	48	489
China	66,894	50	46	50	496
Hong Kong	43,568	51	49	51	505
India	20,362	54	55	56	550
Indonesia	6,645	31	46	48	483
Japan	37,064	50	48	48	483
Korea	17,631	49	50	52	504
Laos	102	51	44	44	465
Macao	834	51	50	51	503
Malaysia	15,299	57	53	54	549
Mauritius	108	54	54	54	541
Nepal	290	50	52	54	521
Pakistan	6,165	53	51	53	520
Philippines	10,594	56	53	55	546
Singapore	3,102	58	54	56	562
Sri Lanka	1,018	55	55	56	554
Thailand	16,004	49	46	46	470
Vietnam	3,046	52	48	50	502
EUROPE					
Austria	269	59	56	56	566
Azores	30	56	52	51	532
Belgium	768	59	56	58	574
Bulgaria	43	55	51	53	526
Cyprus	2,411	52	48	47	490
Czechoslovakia	155	57	52	54	543
Denmark	487	62	57	57	585
Finland	544	60	56	55	570
France	3,941	56	54	57	557
Germany	4,042	59	57	57	577
Great Britain	204	58	55	56	564
Greece	7,941	53	49	48	502
Hungary	136	56	52	55	545
Iceland	320	60	56	54	568
Ireland	20	61	58	59	593
Italy	1,853	55	54	56	549
Luxembourg	53	60	58	59	592
Malta	21	62	60	59	605
Netherlands	1,456	62	57	58	591
Norway	1,350	60	55	54	563
Poland	599	55	51	52	527
Portugal	411	55	51	53	531
Rumania	414	55	51	55	539
Spain	1,150	55	52	55	541
Sweden	1,111	62	56	57	582
Switzerland	1,161	58	55	56	567
Turkey	3,577	53	48	49	498
U.S.S.R.	1,354	55	50	51	519
Yugoslavia	502	55	50	51	519
MIDDLE EAST					
Bahrain	466	52	45	43	468
Iran	47,345	51	44	44	485
Iraq	2,071	50	45	45	482
Israel	3,458	57	51	51	531
Jordan	11,699	49	44	44	457
Kuwait	2,338	49	42	42	441
Lebanon	8,306	52	47	46	483
Oman	103	51	46	45	473
Qatar	281	48	41	40	433
Saudi Arabia	6,998	49	42	41	441
Syria	1,912	51	46	46	477
United Arab Emirates	550	49	42	41	442
Yemen	436	49	45	44	460
PACIFIC REGION					
American Samoa	1,283	48	41	41	437
Australia	231	55	50	50	518
Caroline Islands	779	49	42	42	443
Fiji	116	56	53	53	539
Mariana Islands	126	54	46	47	492
Marshall Islands	160	45	38	39	409
Tahiti	76	52	48	50	499
Tonga	232	48	43	43	448
Western Samoa	121	51	44	44	461

Note: Total scores are reported on a scale of 200 to 800. Data are based on 473,944 foreign students seeking admission to institutions in the United States who took the Test of English as a Foreign Language (TOEFL) from September 1978 through August 1980. This figure includes 25,399 students who did not report their country of birth, who reported English as their native language, or whose native language could not be determined. Means are not reported for subgroups of less than 15 for a total of 186 applicants.

SOURCE: EDUCATIONAL TESTING SERVICE

CHRONICLE SURVEY

College and University Expenditures

Changes from 1978-79 to 1979-80, by type of institution and category of expense

Private Institutions

	Change from 1978-79 to 1979-80				Share of total spending in 1979-80 (e)
	Average (a)	Low (b)	Median (c)	High (d)	
Institutions of all types					
Total educational and general expenditures	+12.7%	+ 9.4%	+12.4%	+15.0%	100.0%
Instruction	+13.4%	+ 7.0%	+10.7%	+15.3%	41.1%
Research	+12.6%	0.0%	0.0%	+10.9%	17.8%
Public service	+14.2%	0.0%	0.0%	+11.4%	1.2%
Academic support	+11.5%	+ 3.9%	+11.8%	+18.6%	12.0%
Student services	+12.1%	+ 6.6%	+12.7%	+17.1%	5.4%
Institutional support	+15.3%	+ 5.3%	+13.4%	+20.5%	12.5%
Plant operation and maintenance	+10.3%	+ 5.0%	+15.6%	+22.2%	10.1%
Auxiliary enterprises	+11.8%	+ 6.4%	+10.2%	+15.2%	—
Hospitals and independent operations	+ 2.8%	0.0%	0.0%	0.0%	—
Total expenditures	+13.0%	+ 9.1%	+11.6%	+14.4%	—
Research universities					
Total educational and general expenditures	+13.1%	+10.9%	+11.6%	+15.1%	100.0%
Instruction	+14.6%	+10.1%	+12.9%	+17.0%	38.3%
Research	+16.3%	+12.6%	+17.1%	+19.8%	26.1%
Public service	+14.1%	0.0%	0.0%	+20.6%	1.0%
Academic support	+10.6%	+ 9.2%	+13.0%	+16.3%	13.0%
Student services	+11.3%	+ 5.4%	+13.6%	+18.5%	3.0%
Institutional support	+16.8%	+ 6.8%	+13.3%	+18.9%	10.0%
Plant operation and maintenance	+ 7.7%	+ 3.9%	+ 9.5%	+20.5%	8.8%
Auxiliary enterprises	+13.2%	+ 9.6%	+11.0%	+19.9%	—
Hospitals and independent operations	+17.4%	0.0%	0.0%	+16.9%	—
Total expenditures	+13.9%	+11.0%	+13.2%	+14.6%	—
Other Ph.D.-granting universities					
Total educational and general expenditures	+12.5%	+11.5%	+12.9%	+14.9%	100.0%
Instruction	+13.2%	+ 9.4%	+12.0%	+18.1%	46.4%
Research	+ 6.9%	0.0%	+10.4%	+23.7%	11.1%
Public service	+17.9%	- 6.0%	+ 4.7%	+28.9%	2.2%
Academic support	+11.2%	+ 4.6%	+12.7%	+15.0%	12.7%
Student services	+14.1%	+ 8.8%	+11.1%	+16.6%	6.2%
Institutional support	+11.4%	+ 7.3%	+13.5%	+20.5%	12.0%
Plant operation and maintenance	+12.5%	+ 3.8%	+10.2%	+20.1%	9.5%
Auxiliary enterprises	+ 9.5%	+ 8.4%	+12.1%	+15.2%	—
Hospitals and independent operations	+16.5%	0.0%	0.0%	0.0%	—
Total expenditures	+12.4%	+ 9.7%	+12.3%	+14.6%	—
Comprehensive colleges and universities					
Total educational and general expenditures	+12.1%	+10.0%	+12.0%	+15.1%	100.0%
Instruction	+10.6%	+ 8.4%	+10.3%	+15.0%	46.3%
Research	+17.7%	0.0%	0.0%	+ 5.6%	6.2%
Public service	+ 5.8%	0.0%	0.0%	+12.6%	1.3%
Academic support	+10.2%	+ 2.7%	+ 9.6%	+18.6%	9.4%
Student services	+12.3%	+ 7.9%	+12.2%	+15.9%	8.3%
Institutional support	+11.5%	+ 2.4%	+11.4%	+19.8%	15.8%
Plant operation and maintenance	+16.6%	+10.5%	+18.3%	+25.4%	12.7%
Auxiliary enterprises	+12.2%	+ 7.8%	+10.8%	+17.1%	—
Hospitals and independent operations	- 3.4%	0.0%	0.0%	0.0%	—
Total expenditures	+12.1%	+ 9.6%	+11.9%	+14.4%	—
2-year colleges					
Total educational and general expenditures	+11.2%	+ 6.3%	+11.0%	+15.2%	100.0%
Instruction	+12.6%	+ 2.2%	+12.6%	+17.0%	41.9%
Research	-100.0%	0.0%	0.0%	0.0%	0.0%
Public service	- 22.0%	0.0%	0.0%	0.0%	1.2%
Academic support	+10.6%	- 6.9%	+ 6.3%	+17.9%	7.4%
Student services	+11.7%	+ 5.0%	+13.0%	+21.4%	11.8%
Institutional support	+ 6.5%	- 1.3%	+11.5%	+24.7%	22.2%
Plant operation and maintenance	+16.8%	+ 2.6%	+17.4%	+29.4%	15.4%
Auxiliary enterprises	+10.2%	+ 3.3%	+ 9.6%	+19.6%	—
Hospitals and independent operations	-100.0%	0.0%	0.0%	0.0%	—
Total expenditures	+10.5%	+ 5.9%	+11.0%	+14.3%	—
Selective liberal-arts colleges					
Total educational and general expenditures	+12.6%	+ 9.8%	+13.0%	+14.0%	100.0%
Instruction	+10.0%	+ 7.9%	+ 9.4%	+14.0%	46.0%
Research	+26.6%	-24.2%	0.0%	+23.4%	0.9%
Public service	+15.5%	0.0%	0.0%	+ 2.3%	0.8%
Academic support	+17.5%	+ 6.2%	+14.3%	+19.1%	9.6%
Student services	+13.5%	+ 6.2%	+13.2%	+17.3%	10.8%
Institutional support	+16.8%	+10.1%	+14.8%	+23.6%	17.5%
Plant operation and maintenance	+15.7%	+ 9.2%	+16.0%	+21.0%	14.5%
Auxiliary enterprises	+ 9.2%	+ 5.9%	+ 9.2%	+12.3%	—
Hospitals and independent operations	+ 8.3%	0.0%	0.0%	0.0%	—
Total expenditures	+11.8%	+ 9.8%	+11.0%	+13.4%	—
Less selective liberal-arts colleges					
Total educational and general expenditures	+11.6%	+ 7.5%	+13.2%	+16.1%	100.0%
Instruction	+10.6%	+ 3.4%	+10.4%	+15.8%	42.3%
Research	+15.2%	0.0%	0.0%	0.0%	1.0%
Public service	+25.9%	0.0%	0.0%	+10.2%	0.9%
Academic support	+15.0%	+ 3.3%	+12.6%	+24.5%	9.1%
Student services	+12.6%	+ 6.4%	+12.4%	+18.7%	12.2%
Institutional support	+17.9%	+10.1%	+13.7%	+21.1%	21.6%
Plant operation and maintenance	+13.0%	- 3.7%	+14.9%	+26.4%	13.0%
Auxiliary enterprises	+ 9.2%	+ 3.7%	+ 9.7%	+16.4%	—
Hospitals and independent operations	-97.7%	0.0%	0.0%	0.0%	—
Total expenditures	+10.1%	+ 7.2%	+11.3%	+15.7%	—

Public Institutions

	Change from 1978-79 to 1979-80				Share of total spending in 1979-80 (e)
	Average (a)	Low (b)	Median (c)	High (d)	
Institutions of all types					
Total educational and general expenditures	+10.3%	+ 6.9%	+ 9.9%	+13.6%	100.0%
Instruction	+ 8.2%	+ 5.1%	+ 8.5%	+11.7%	47.2%
Research	+24.1%	0.0%	0.0%	+11.5%	11.2%
Public service	+25.8%	0.0%	+ 6.1%	+31.0%	3.3%
Academic support	+ 9.8%	- 1.8%	+ 8.0%	+16.6%	10.7%
Student services	+11.0%	+ 4.6%	+ 9.8%	+19.6%	6.1%
Institutional support	+15.2%	+ 5.7%	+10.6%	+21.0%	10.7%
Plant operation and maintenance	+ 9.7%	+ 3.0%	+10.0%	+14.8%	10.9%
Auxiliary enterprises	+14.3%	0.0%	+ 9.6%	+16.7%	—
Hospitals and independent operations	+11.6%	0.0%	0.0%	0.0%	—
Total expenditures	+11.1%	+ 7.5%	+ 9.9%	+13.7%	—
Research universities					
Total educational and general expenditures	+11.0%	+ 8.9%	+10.0%	+10.7%	100.0%
Instruction	+ 9.6%	+ 7.0%	+ 8.0%	+ 9.1%	40.1%
Research	+13.0%	+ 9.4%	+11.8%	+16.1%	24.8%
Public service	+16.4%	+11.3%	+20.4%	+47.5%	4.8%
Academic support	+11.7%	+ 5.2%	+ 8.9%	+15.6%	10.5%
Student services	+10.7%	+ 5.8%	+ 9.9%	+16.1%	3.7%
Institutional support	+14.2%	+ 9.1%	+12.7%	+22.7%	7.2%
Plant operation and maintenance	+ 9.7%	+ 5.3%	+10.0%	+15.2%	8.9%
Auxiliary enterprises	+19.3%	+ 4.1%	+11.1%	+16.6%	—
Hospitals and independent operations	+17.2%	0.0%	+ 5.9%	+16.3%	—
Total expenditures	+12.5%	+ 8.3%	+10.6%	+11.5%	—
Other Ph.D.-granting universities					
Total educational and general expenditures	+ 9.6%	+ 6.0%	+ 9.1%	+11.8%	100.0%
Instruction	+ 7.5%	+ 5.8%	+ 7.2%	+ 8.7%	51.4%
Research	+20.4%	+ 9.8%	+22.7%	+43.4%	5.5%
Public service	+48.9%	+ 9.9%	+23.1%	+83.9%	2.3%
Academic support	+ 6.7%	6.2%	+ 6.9%	+15.1%	12.7%
Student services	+ 3.9%	+ 4.6%	+ 5.5%	+20.1%	5.3%
Institutional support	+10.6%	+10.4%	+11.3%	+30.8%	10.5%
Plant operation and maintenance	+11.2%	+ 9.0%	+12.5%	+14.3%	12.3%
Auxiliary enterprises	+11.1%	+ 8.4%	+13.6%	+16.1%	—
Hospitals and independent operations	+17.0%	0.0%	0.0%	0.0%	—
Total expenditures	+10.9%	+ 8.3%	+ 9.8%	+12.5%	—
Comprehensive colleges and universities					
Total educational and general expenditures	+10.2%	+ 6.3%	+ 9.9%	+12.1%	100.0%
Instruction	+ 8.6%	+ 4.6%	+ 8.3%	+11.5%	50.5%
Research	+25.6%	0.0%	+ 8.9%	+61.2%	3.0%
Public service	+19.8%	2.1%	+ 9.9%	+91.5%	2.6%
Academic support	+ 4.6%	1.7%	+ 5.6%	+18.4%	10.6%
Student services	+14.5%	+ 6.6%	+11.1%	+23.3%	8.2%
Institutional support	+19.5%	+ 8.8%	+11.7%	+23.8%	12.8%
Plant operation and maintenance	+ 7.0%	- 0.4%	+ 9.8%	+13.1%	12.4%
Auxiliary enterprises	+ 9.8%	+ 1.5%	+ 9.9%	+16.6%	—
Hospitals and independent operations	+ 9.3%	0.0%	0.0%	0.0%	—
Total expenditures	+10.2%	+ 7.1%	+ 9.0%	+11.7%	—
2-year colleges					
Total educational and general expenditures	- 9.8%	+ 6.9%	+11.0%	+15.1%	100.0%
Instruction	+ 5.6%	+ 4.6%	+ 9.8%	+17.7%	53.4%
Research	+46.2%	0.0%	0.0%	0.0%	0.0%
Public service	+35.0%	- 2.9%	0.0%	+18.9%	1.8%
Academic support	+15.3%	- 6.5%	+ 8.0%	+17.4%	9.6%
Student services	+12.3%	+ 2.3%	+ 9.0%	+22.5%	8.7%
Institutional support	+14.5%	+ 1.7%	+ 8.9%	+20.8%	14.7%
Plant operation and maintenance	+12.1%	+ 2.6%	+10.4%	+17.3%	11.7%
Auxiliary enterprises	+13.0%	0.0%	+ 8.2%	+21.0%	—
Hospitals and independent operations	0.0%	0.0%	0.0%	0.0%	—
Total expenditures	+10.1%	+ 7.7%	+11.5%	+15.3%	—

(a) Mean increase or decrease, 1979-80 compared with 1978-79
(b) One-fourth of the institutions reported increases smaller than this
(c) One-half of the institutions reported increases larger than this
(d) One-fourth of the institutions reported increases larger than this
(e) Percentage distribution of 1979-80 expenditures

Note: Survey data are based on information from 133 private institutions and 100 public institutions in a stratified random sample and are part of a continuing series of studies by W. John Minter and Howard R. Bowen. Research for the public institutions' financial data for 1979-80 was underwritten in part by the American Association of State Colleges and Universities, the American Association of Community and Junior Colleges, and the National Association of State Universities and Land-Grant Colleges. A technical report on survey design and sampling statistics will be available later from John Minter Associates. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: MINTER-BOWEN STUDY OF AMERICAN HIGHER EDUCATION

1979-80 Spending Up 13 Pct. at Private Colleges, 11 Pct. at Publics

Operating expenses at private colleges and universities increased in fiscal 1980 by 13 per cent, the Chronicle Survey has found. At public institutions they went up 11 per cent.

The increases in expenses approximately matched the increases in operating revenues in the same period. Total operating revenues for fiscal 1980 were up 14.4 per cent at private institutions and 11.9 per cent at public institutions (*The Chronicle*, January 13).

The survey's financial data are part of a continuing study of American higher education by W. John Minter, head of an education-research company in Boulder, Colo., and Howard R. Bowen, professor of economics and education at the Claremont Graduate School.

At public colleges and universities, the sharpest increases in spending were for research—up 24.1 per cent—and for public services—up 25.8 per cent. Public-service budgets primarily support noninstructional services for groups outside the institution, including seminars, community services, and cooperative extension services.

The average increases at private institutions were 12.6 per cent for research and 14.2 per cent for public services.

The amount spent on instruction, which accounts for more than 40 per cent of operating costs at public colleges and universities, increased by 8.2 per cent over the previous year—not as much as total operating costs, which increased by 11 per cent.

At private colleges and universities, spending for instruction rose by 13.4 per cent—about the same rate as their total spending.

The amount spent for academic support, which includes libraries, museums, audiovisual services, and academic administration, increased by an average of 11.5 per cent at private institutions and 9.8 per cent at public institutions.

Money spent on student services, a category that includes admissions, counseling, financial-aid administration, and extracurricular programs, went up 11 per cent at public institutions and 12.1 per cent at private institutions.

Institutional support, which includes general administrative services and legal and fiscal operations, cost both public and private institutions 15 per cent more than in the previous year.

Spending for plant operation and maintenance rose by about 10 per cent at both types of institution.

The total for educational and general expenditures increased 10.3 per cent at public institutions and 12.7 per cent at private institutions.

The public institutions, on the average, spent 14.3 per cent more on auxiliary enterprises in fiscal 1980 than in the preceding year, although their revenue from auxiliary enterprises during the same period increased by only 12.5 per cent.

Private institutions increased spending on auxiliary enterprises by 11.8 per cent, which compared with a 14.7 per cent increase in revenue from that source.

Auxiliary enterprises include residence halls, food services, college stores, intercollegiate athletics, and other services to students, faculty, or staff for which fees are charged to cover all or most of the costs.

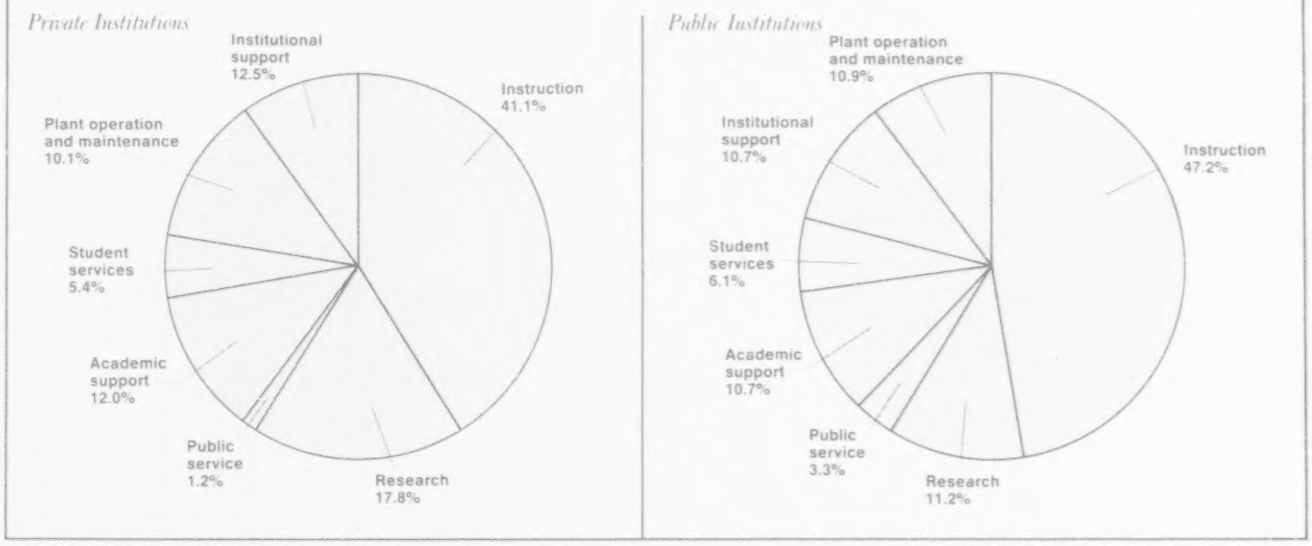
Spending for the operation of hospitals, which is averaged over all institutions whether they have hospitals or not, rose 11.6 per cent at public institutions and 2.8 per cent at private institutions.

The data are from audited financial statements of 133 private colleges and universities and 100 public institutions in a stratified random sample.

Additional findings of the Minter-Bowen study will be reported in future issues of *The Chronicle*.

—JACK MAGARRELL

HOW COLLEGES SPENT THEIR MONEY IN 1979-80



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: MINTER-BOWEN STUDY OF AMERICAN HIGHER EDUCATION

NATIONAL CENTER FOR HIGHER EDUCATION MANAGEMENT SYSTEMS

PRESENTS THESE SEMINARS FOR WINTER/SPRING 1982

Dynamics of Decisionmaking in Colleges and Universities *Leader:* J. Victor Baldridge	**Honolulu** February 1-2	**Washington, D.C.** March 1-2	**Seattle** April 1-2	**Los Angeles** April 5-6	
Strategic Planning in the Higher Education Setting *Leader:* Robert Shirley	**Phoenix** March 9		**Minneapolis** April 26	**Tulsa** April 27	
Legal Planning in Colleges and Universities in the 80's *Leader:* Philip R. Moots	**Washington, D.C.** February 2-3	**Chicago** March 29-30			**San Francisco** May 3-4
Evaluating Higher Education: The Institution, Its Programs, Administrators, and Faculty *Leader:* Richard I. Miller	**Honolulu** February 4-5		**Louisville** April 22-23		**Washington, D.C.** May 6-7
Enrollment Planning: Strategic Issues and Institutional Implications *Leader:* Larry Leslie	**Phoenix** March 10-11	**New York City** March 24-25	**St. Louis** April 3-4	**Tulsa** April 28-29	**Washington, D.C.** May 12-13
The Nature and Role of Information for Management in Higher Education *Leaders:* Paul T. Brinkman & Dennis Jones					**Washington, D.C.** May 10-11
Improving Administrative Effectiveness *Leaders:* David A. Whetten & Kim Cameron		**Honolulu** March 29-30			**Boston** May 20-21

For additional information or to register, contact: Sheryl Meek, Meeting Coordinator, NCHEMS, P.O. Drawer P, Boulder, Colorado 80302, (303) 497-0365